## Endangered Species Act Protection Not Needed for Seven Southeastern Species Frequently Asked Questions

# Why is the Service not placing these species on the Federal List of Endangered and Threatened Wildlife and Plants?

In order to be placed on the Federal List of Endangered and Threatened Wildlife and Plants, a plant or animal must face threats leading to endangerment or extinction in the foreseeable future. After reviewing the best available science, the Service determined that three of these species, the Louisville cave beetle, Highlands tiger beetle, and sicklefin redhorse, are not facing threats that warrant listing them. More information needs to be compiled about the black mudalia, an aquatic snail, before the Service can grant it protection under the Endangered Species Act (ESA). Another species, the Tatum Cave beetle, is considered extinct.

## Why did the Service consider these animals for the Federal List of Endangered and Threatened Wildlife and Plants?

The ESA allows anyone to request or petition the Service to add a plant or animal to the Federal List of Endangered and Threatened Wildlife and Plants. The Service was petitioned to place all five of these animals on the list, and all were considered "candidates" for listing. The Service is in the midst of a multi-year work plan to address these species, and evaluating these animals is a part of the scheduled 2016 workload.

## **Species Information**

## Louisville Cave beetle

#### Where does the Louisville Cave beetle live?

Jefferson County, Kentucky

#### What contributed to the decision not to list the Louisville Cave beetle?

A. Historically, this beetle was known to exist in two caves in Jefferson County, Kentucky: Eleven Jones Cave and Highbaugh Cave. Highbaugh Cave is no longer accessible by humans, but the species continues to occur in Eleven Jones Cave, and over the last two years,

populations of the species have been discovered in three additional caves: Sauerkraut, Cave Hill, and Cave Creek caves. Although stressors like human visitation and sedimentation still impact these caves, the Service has no evidence that these stressors are negatively affecting the populations.

### Tatum Cave beetle

#### Where does the Tatum Cave beetle live?

Marion County, Kentucky

#### What contributed to the decision not to list the Tatum Cave beetle?

This beetle has been documented from a single cave, Tatum Cave, in eastern Marion County, Kentucky. Despite multiple intensive surveys of Tatum Cave, the species has not been observed there since 1965 (a period of 51 years). Based on this and the best available scientific information, the Service believes the Tatum Cave beetle to be extinct. Therefore, the Service will not list the species under the ESA.

### Black mudalia

#### Where does the black mudalia live?

The black mudalia is believed to be in Jefferson and Blount Counties in Alabama.

#### What contributed to the decision not to list the black mudalia?

Little is known about this aquatic snail thought to be in the Black Warrior Basin River drainage in Jefferson and Blount counties, Alabama. From the 1800's until present time, researchers have recorded conflicting biological information regarding this species. In 2016, the Service learned that two different samples previously identified as the black mudalia were actually not the same. Before black mudalia can receive protection, scientists must accurately identify the snail and determine its status and distribution.

## Highlands tiger beetle

## Where does the Highlands tiger beetle live?

Polk and Highlands Counties in Florida.

## What contributed to the decision not to list the Highlands tiger beetle?

This beetle is restricted to areas of bare sand within scrub and sandhills off Lake Wales Ridge in Polk and Highlands counties, Florida. In the early 2000's, biologists believed declining scrub habitat posed a major threat to this species; but, research has shown the Highlands tiger beetle to be resilient. With the documentation of 16 newly identified occupied sites, the

identification of improved habitat quality, and the existing estimated adult beetle count of more than 10,000 individuals in 56 sites, the Service finds find this beetle does not need ESA protection.

## Sicklefin redhorse

#### Where does the sicklefin redhorse live?

- In the Little Tennessee River basin in Jackson, Macon, and Swain counties in North Carolina
- In the Hiwassee River basin in Cherokee and Clay counties in North Carolina, and Towns County in Georgia.

### What contributed to the decision not to list the sicklefin redhorse?

In 2005, the Service designated the sicklefin redhorse a candidate for the list, meaning it warranted listing, but doing so was precluded by higher priority species. Shortly thereafter, the North Carolina Wildlife Resources Commission began coordinating recovery efforts for the redhorse centered on establishing and maintaining redhorse stocking, expanding the knowledge of sicklefin genetics, and expanding the redhorse's range into historic habitat. An agreement signed earlier this year formalized the partnership and expanded it to include the Georgia Department of Natural Resources, Duke Energy, and the Tennessee Valley Authority. We find this fish does not need ESA protection based on the stability of existing populations, re-evaluation of threat likely to affect populations in the future, and development of a Candidate Conservation Agreement which ensures continued participation by all stakeholders in a focussed effort to address and mitigate potential threats while expanding the range and population health of the species.

### Arkansas darter

#### Where does the Arkansas darter live?

• In eastern Colorado, southwest and central Kansas, northwest and northeast Oklahoma, southwest Missouri, and northwest Arkansas.

#### What contributed to the decision not to list the Arkansas darter?

The Service conducted a Species Status Assessment on the Arkansas darter in close coordination with the states, which included a combined survey effort of a substantial portion of the species' range that had not been thoroughly surveyed in years. This expanded our knowledge by recording 80 Arkansas darter populations in three unique areas, including high plains, mixed grass prairie, and Ozark Plateau, spread across its multi-state range.

In previous candidate assessments for the Arkansas darter, threats considered have been water depletion, water quality degradation, urbanization and development, confined-animal feeding operations, dams and reservoirs, salt cedar invasion, disease, and predation. Although localized negative effects have been observed, all of these stressors (other than water depletion) occur at a limited scale and scope and the overall impact to the fish is minimal.

The Arkansas darter continues to occupy populations in the geographic range subject to water depletion despite more than 40 years of groundwater pumping and droughts. The Service also has a better perspective on the scope and scale of water depletion in these areas thanks to a USGS hydrology study that was conducted to inform this assessment. We now know more than we ever have about this species of fish and through our assessment feel confident that the Arkansas darter does not require federal protection thus receives a not warranted determination.

## Hirst Brother's panic grass

### What contributed to the decision not to list the Hirst Brothers' panic grass?

The Service must base its ESA listing determinations solely on the best scientific and commercial data available. Under the ESA, only species, subspecies, and distinct population segments of vertebrate species (DPS) are considered listable entities. Plant varieties are considered equivalent to subspecies.

Only a valid listable entity may be listed as a threatened or an endangered species. If there is not a valid listable entity then we do not conduct a threats assessment as part of the listing determination. The Flora of North America is considered the taxonomic authority for plants in North America because it is a comprehensive, systematic taxonomic account of the plants of North America. While several authors have published regional flora and descriptions that recognize *Panicum hirstii/Dichanthelium hirstii* as a separate entity, few have published taxonomic treatments. The last taxonomic treatment was the 2003 FNA which explicitly relegates *P. hirstii/D. hirstii* to a synonym of *D. dichotomum* subsp. *Roanokense* (Ashe).

This indicates that the plant the Service had considered a candidate species is not a valid taxon and is a component of a larger, more widespread species that appears to grow on the coastal plain from Delaware to southeastern Texas and in the West Indies.

## **Public role in conservation**

## How can people support the ongoing conservation of the animals found in caves?

- Proper disposal of chemicals Caves are connected by subterranean drainage networks that are rarely obvious above ground and can stretch for miles. Pollution entering one of these networks at one point, say a sinkhole in a field, can contaminate groundwater in a cave miles away, harming the animals in that cave.
- Observing closures and advisories for rare species A certain way to avoid trampling of organisms is simply to stay out of caves that support rare animals.
- Gating One way landowners can control access to caves on their land is to install metal gates that allow bats and other animals to move in and out but prevent humans from entering.

## How can people support the conservation of the redhorse, snails, and other aquatic animals?

- Plant native trees and shrubs along bodies of water and allow these areas to grow naturally. The root systems hold bank soil in place; branches and leaves provide shade that lowers water temperature; and the plants filter stormwater runoff, removing harmful chemicals and silt that can pollute and clog waterways.
- Look for ways to move rainwater off paved and other impervious surfaces, allowing it to soak into the ground. When channeled off paved surfaces and into streams, rainwater carries pollutants (e.g., oils, road salt) and excess water from paved surfaces, eroding stream banks and stream bottoms not structured to handle the excess water. Helpful techniques include using pervious pavements, rain barrels, and installing rain gardens gardens where rainwater is channeled and allowed to soak into the ground.
- Let naturally-fallen woody material remain in streams and lakes.
- Keep bodies of water free of trash.

## **More information**

# Where can I find more information on these species or the listing process?

- Sicklefin redhorse Call the Asheville Ecological Services Field Office at 828/258-3939.
- Highlands tiger beetle Call the South Florida Ecological Services Field Office at 772/469/4323
- Louisville Cave beetle Call the Kentucky Ecological Services Field Office at 502/695-0468.
- Tatum Cave beetle Call the Kentucky Ecological Services Field Office at 502/695-0468.
- Black mudalia Call the Alabama Ecological Services Field Office at 251-441-6630
- Listing process Visit <u>www.fws.gov/southeast/candidateconservation</u>